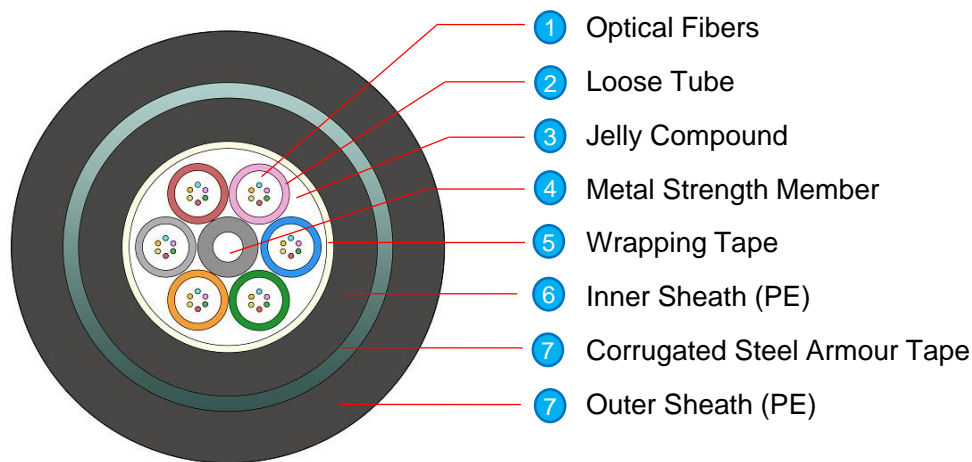




### OVERVIEW

Zemecs F122-SS series direct burial type fiber optic cables are used to establish an underground long distance data transmission backbone. The fibers are equally distributed into jelly filled loose tubes and unused space is filled with dummy ones to maintain cable circularity. A metallic material (generally steel which may be PE coated) is located centrally as strength member and filling compound is injected to prevent penetration of water. A transparent film is wrapped over and jacketed with an inner PE sheath. Finally, a corrugated steel armour tape is applied longitudinally and the cable is completed with an outer PE sheath. Like all other Zemecs cables, F122-SS series cables are designed and manufactured to exceed performances specified by ITU-T G652.D, IEC 60793, IEC 60974, ISO/IEC 11801 and TIA 568.3-D.



### FEATURES

- Exceeds requirements of ITU-T G652.D, IEC 60793, IEC 60974, ISO/IEC 11801 and TIA 568.3-D standards
- UV resistant high density PE outer sheath
- Double sheath construction enabling rodent protection and direct burial use
- Gel filled cable core for water tightness
- Constructed up to 144 fibers

### APPLICATIONS

- Telecommunication backbone networks
- Long distance and interbuilding communication networks
- Underground cabling applications requiring rodent protection

### MATERIAL AND PHYSICAL SPECIFICATIONS

Cable Outer Diameter	<b>2-48F:15,1 50-84F:15,7 86-96F:16,2 98-108F:17,0 110-120F:17,7 122-132F:18,5 134-144F:19,3 ± 0,20</b>	mm.
Sheath Material	HDPE	
Sheath Thickness	1,80 ± 0,10	mm.
Loose Tube Outer Diameter	2,00 ± 0,07	mm.
Cable Weight	<b>2-48F:225 50-84F: 235 86-96F: 245 98-108F: 270 110-120F: 290 122-132F:315 134-144F:335 ± %3</b>	kg./km.
Sheath Colour	Black(standard)	

### FIBER AND TUBE COUNT

FIBER COUNT	4	6	12	24	36	48	60	72	96	144
Tube/Fiber	2	2	2	4	6	8	12	12	12	12
Filled Tubes	2	3	6	6	6	6	5	6	8	12
Dummy Tubes	4	3	0	0	0	0	1	0	0	0



**COMPLIANCE**

Standards For Generic Cabling And Cabling Components			
• ITU-T G652.D	• ISO/IEC 11801 Ed.2.1		
• IEC 60793-2	• EN 50173		
• IEC 60794-2-20	• ANSI/TIA/EIA-568.3-D		
Standards For The Restriction Of Use Of Hazardous Substances In Electrical And Electronic Equipments			
• 2011/65/EU (RoHS-2)			
Test Standards			
• Tension	IEC 60794-1-2E1	• Twist	IEC 60794-1-2E7
• Crush	IEC 60794-1-2E3	• Cable Bend	IEC 60794-1-E11
• Impact	IEC 60794-1-2E4	• Temp.Cycling	IEC 60794-1-F1
• Repeated Bending	IEC 60794-1-2E6		

**OPTICAL SPECIFICATIONS**

Fiber Type	Singlemode ITU-T G652.D	
Attenuation (@1.310 nm./1.550nm.)	0,34 / 0,20	dB/km., Max.
Chromatic Dispersion (@1.310 nm./1.550nm.)	3,5 / 18	ps/nm.km., Max.
Zero Dispersion Wavelength ( $\lambda_0$ )	$1.300 \leq \lambda_0 \leq 1.324$	Nm.
Zero Dispersion Slope (So)	0,092	ps/(nm <sup>2</sup> .km.) Max.
Cable Cutoff Wavelength ( $\lambda_{cc}$ )	1.260	nm., Max.

**ENVIRONMENTAL SPECIFICATIONS**

Transportation and Storage Temperature	-40 / +80	°C
Installation Temperature	-30 / +60	°C
Operation Temperature	-40 / +80	°C
Relative Humidity	10 - 90, non-condensing	%

**MECHANICAL SPECIFICATIONS**

Tensile Strength (Installation/Operation)	2-72F: 3.000 / 1.700 74-144F: 5.000 / 2.000	N./100mm.
Crush Strength (Installation/Operation)	5.000 / 2.000	N./100mm.
Bending Radius (Installation/Operation)	25xO.D. / 12,5xO.D.	

**GEOMETRICAL SPECIFICATIONS**

Mode Field Diameter (@1.310nm./1.550nm.)	9,20 / 10,40	µm.
Cladding Diameter	125,0±1,0	µm.
Core/Coating Concentricity Error	1	%, Max.
Coating Diameter	245±7	µm.
Coating/Cladding Concentricity Error	12	µm., Max.
Core/Cladding Concentricity Error	0,6	µm., Max.

**PART NUMBER CODING**

Part Number	Product Description
F122-SS-1ESD-FFFL	Zemecs Singlemode Multi Loose Tube Steel Armour Double Sheath Metallic PE Fiber Optic Cable, 2000m. Reel

FFF: Fiber Count			
<b>12:</b>	12	<b>72:</b>	72
<b>24:</b>	24	<b>96:</b>	96
<b>36:</b>	36	<b>120:</b>	120
<b>48:</b>	48	<b>144:</b>	144

